

AF/S676
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99MRA0015

UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Fisher, et al.
Serial No.: 09/784,991
Filed: February 16, 2001
Group Art Unit: 3676
Examiner: Boswell, Christopher J.
Title: LATCH MECHANISM

Mail Stop Appeal Brief
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

Subsequent to the filing of the Notice of Appeal on January 12, 2004, Appellant hereby submits its brief. Appellant asserts that no fees are due because Appellant has already paid the appeal brief fee with the submission of the first appeal brief on September 16, 2002. However, the Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds, P.C for any additional fees.

REAL PARTY IN INTEREST

The real party in interest is Meritor Light Vehicle Systems (UK) Limited the assignee of the entire right and interest in this Application.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

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STATUS OF CLAIMS

Claims 4-7, 11-13 and 15-27 stand finally rejected under 103(a).

STATUS OF AMENDMENTS

All amendments have been entered.

SUMMARY OF THE INVENTION

As shown in Figures 1-4, this invention relates to a latch mechanism 10 for releasably retaining a door. The latch mechanism 10 includes a latch bolt 14 having a closed condition capable of retaining a striker 32 and an open condition capable of releasing the striker 32. A pawl 16 releasably secures the latch bolt 14 in the closed condition. At least one of the latch bolt 14 and the pawl 16 are made of a plurality of structural laminations. The profile of one of the laminations is different from the profile of the other laminations (page 4, lines 16 to page 5, line 6 of the original specification). This basic structure is set forth in Claim 22.

Claim 11, which depends on claim 22, recites that one of the plurality of laminations includes a tab. Claim 23 also depends on claim 22 and adds that the profile of one of the plurality of laminations includes a tab having a tab profile and the profile of the other of the plurality of laminations has a local profile proximate to the tab profile which differs from the local profile. Finally, dependent claim 27 adds that the profile of one of the plurality of laminations and the profile of the other of the plurality of laminations are external profiles

Claim 15 recites that at least one of the plurality of lamination is non-homogeneous such that a strength of the laminations as measured in a first direction is different from a strength of the laminations as measured in a second direction (page 7, lines 16-22 of the original specification). Claim 19 depends on claim 22 and recites that the plurality of laminations are at least partially over molded by a non-structural plastic (page 7, lines 11-15 of the original specification).

ISSUES

1. Are Claims 23-27 properly rejected under 35 U.S.C. 112, first paragraph?

2. Are Claims 4-7, 11-13, 15-22 and 26 properly rejected under 35 U.S.C. 103(a) based on Spurr in view of Rogers and further in view of Cutler?

GROUPINGS OF CLAIMS

- A. Claims 23-27 stand or fall together.
- B. Claim 26 stands or falls alone.
- C. Claim 27 stands or falls alone.
- D. Claims 4-7, 11-13 and 15-22 stand or fall together.
- E. Claim 11 stands or falls alone.
- F. Claim 15-17 stand or fall together.
- G. Claims 19 and 20 stand or fall together.

PATENTABILITY ARGUMENTS

A. The rejection of Claim 23-27 under 35 U.S.C. 112, first paragraph, is improper.

Claims 23-27 stand rejected under 35 USC §112, first paragraph, as failing to comply with the written description requirement. The Examiner states that claims 23-27 contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner states that the recitation in claim 23 that “said profile of one of said plurality of laminations includes a tab having a tab profile and said profile of the other of said plurality of laminations has a local profile proximate to said tab profile, and said tab profile is different from said local profile” is not supported. Appellant respectfully disagrees.

The specification and figures clearly support this recitation in claim 23. On page 4, lines 21-23 of the original specification, it is clearly disclosed that the laminations 46 and 47 of the latch bolt 14 are identical, and the lamination 45 differs as it includes a tab 58. Therefore, the lamination 45 having the tab 58 has a tab profile and the laminations 46 and 47 have a local profile. Figure 2 clearly illustrates that the tab profile and the local profile are different. Additionally, on page 5, lines 1-6 of the original specification, it is clearly disclosed that the laminations 61 and 62 of the pawl 16 are identical, and the lamination 60 differs as it includes a tab 64. Therefore, the lamination 60

having the tab 64 has a tab profile and the laminations 61 and 62 have a local profile. Figure 3 clearly illustrates that the tab profile and the local profile are different. The recitations in claim 23 are clearly disclosed and supported in the specification and figures, and the rejection is improper. Appellant respectfully requests that the rejection be withdrawn.

B. The rejection of Claim 26 under 35 U.S.C. 112, first paragraph, is improper.

The Examiner rejected also rejected claim 26 under 35 USC §112, first paragraph, as including the recitation that “said profile of one of said plurality of laminations includes a tab having a tab profile and said profile of the other of said plurality of laminations has a local profile proximate to said tab profile, and said tab profile is different from said local profile.” However, Claim 26 does not depend on claim 23, but rather depends on claim 22. Therefore, claim 26 does not recite the rejected language. Therefore, claim 26 is not properly rejected under 35 USC 112, first paragraph. Applicant requests that the rejection be withdrawn.

C. The rejection of Claim 27 under 35 U.S.C. 112, first paragraph, is improper.

The Examiner rejected also rejected claim 27 under 35 USC §112, first paragraph, as including the recitation that “said profile of one of said plurality of laminations includes a tab having a tab profile and said profile of the other of said plurality of laminations has a local profile proximate to said tab profile, and said tab profile is different from said local profile.” However, Claim 27 does not depend on claim 23, but rather depends on claim 22. Therefore, claim 27 does not recite the rejected language. Therefore, claim 27 is not properly rejected under 35 USC 112, first paragraph. The Examiner made no other rejections of claim 27. Therefore, claim 27 is allowable.

D. The rejection of Claims 4-7, 11-13 and 15-22 under 35 U.S.C. 103(a) is improper.

The Examiner finally rejected Claims 4-7, 11-13, 15-22 and 26 under 35 USC 103(a) based on Spurr (U.S. Patent No. 5,906,123) in view of Rogers (U.S. Patent No. 5,951,800) and further in view of Cutler (U.S. Patent No. 6,025,048). Spurr discloses a vehicle door latch assembly 10 including a rotatable claw 12 which coacts with a striker 14. A pawl 16 retains the claw 12 in engagement with the striker 14 to keep a door closed. The Examiner admits on page 3 of the Final Office Action that Spurr does not disclose that the claw 12 and the pawl 16 are formed of

laminations. The Examiner states that Rogers discloses a bolt 6 formed of a plurality of laminations, but admits that Rogers does not disclose that the profile of one of the laminations differs from the profile of the other laminations. Culter teaches a complex hybrid ceramic matrix composite laminate 10 including ceramic layers 12 and CMC layers 14 having fibers that can be aligned unidirectionally or multi-directionally. The Examiner contends it would be obvious to employ a fiber structure as suggested by Cutler in the combination of Spurr and Rogers to establish different profiles, and therefore the claims are obvious. Applicant respectfully disagrees.

The present invention is patentable and strikingly different from the combination of Spurr, Rogers and Cutler. As described by the claims, the present invention provides a vehicle door latch mechanism having a latch bolt and a pawl and:

...at least one of said latch bolt and said pawl is made from a plurality of structural laminations of material wherein a profile of one of said plurality of laminations is different from a profile of the other of said plurality of laminations.

[See Claim 22]. Claims 4-7, 11-13 and 15-27 of the present invention all share this same or similar feature. [See Claims 4-7, 11-13 and 15-27].

Claims 4-7, 11-13, 15-22 and 26 are not obvious in view of the combination of Spurr, Rogers and Cutler. The combination of the references does not disclose, suggest or teach the claimed invention. The claimed latch bolt or pawl includes a plurality of structural laminations, and the profile of one of the laminations differs from the profile of the other laminations. The ceramic layers 12 and 14 of Cutler have unidirectional or multidirectional fibers, but do not have different profiles. As described in the attached dictionary definition, profile is defined "a representation of something in outline." As shown in Figures 2 and 4 of Cutler, the profiles of the layers 12 and 14 are the same. The layers 12 and 14 all have a square profile, and the outlines or profiles of the layers 12 and 14 are not different. Cuter discloses that fibers of the layers 12 and 14 can be in the same direction or different directions, but does not disclose that the layers 12 and 14 have different profiles. None of

the references disclose, suggest or teach components having differing profiles, and therefore the combination of the references does not teach, suggest or disclose the claimed invention.

The Examiner also states that it would be obvious to employ a fiber structure in the combination of Spurr and Rogers, and therefore the claimed invention is obvious. Rogers discloses that the latch components are made of hardened-steel (column 4, lines 67 to 68 and column 5, lines 1 to 3). Steel has a grain structure, not a fiber structure. Due to the properties of steel, it is not possible for the steel latch components of Spurr and Rogers to have a fiber structure as the Examiner contends. The claimed invention is not obvious.

Additionally, it is not obvious to form the latch components of Spurr and Rogers of a ceramic material having a fiber structure. Rogers specifically teaches that the components are made of steel. Rogers teaches against forming latch components of a ceramic material having a fiber structure. Additionally, Cutler discloses a complex ceramic material. There is no motivation or reasons to employ an expensive, complex ceramic material in a latch assembly. There is no motivation to combine the references, and the claims are not obvious. Appellant respectfully requests that the rejection be withdrawn.

E. The rejection of Claim 11 under 35 U.S.C. 103(a) is improper.

The rejection of Claim 11 is separately contested from the rejection of Claims 22 et al. Claim 11 recites that one of the plurality of laminations includes a tab. The Examiner states on page 5 of the Final Office Action that it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the teachings of Rogers to modify the latch assembly of Spurr to include tabs in the latch bolt and the pawl. However, none of the references teach a lamination having a tab. Rogers does not disclose or suggest that any of the laminations has a tab. Cutler does not disclose a lamination, and therefore does not disclose a lamination having a tab. Therefore, the combination of Spurr, Rogers and Cutler does not disclose, suggest or teach a lamination having a tab as recited in claim 11. The combination of Spurr, Rogers and Cutler do not suggest Claim 11, and Appellant respectfully requests that the rejection be withdrawn.

F. The rejection of Claims 15-17 under 35 U.S.C. 103(a) is improper.

The rejection of Claims 15-17 is separately contested from the rejection of Claims 22 et al. Claims 15-17 recite at least one of the plurality of laminations is non-homogeneous and a strength of the lamination as measured in a first direction is different from a strength of the laminations as measured in a second direction. None of the references disclose these features, but the Examiner states that it would have been inherent that fiber is stronger in a transverse direction than in the lateral direction, and therefore the claims are obvious. Appellant respectfully disagrees.

The Federal Circuit has clearly stated that inherency cannot be established simply by asserting that a certain thing may result from a given set of circumstances. To support an inherency argument, the disclosure offered by the Examiner must be “sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function” and that the missing claimed element is “necessarily present” in the reference such that it would be recognized by persons of ordinary skill. *Finnegan Corp. v. ITC*, 51 USPQ2d 1001 (Fed. Cir. 1999), quoting *In re Oelrich*, 666 F.2d 578, 212 USPQ 323 (CCPA 1981). Further, “the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic” MPEP §2112. To rely upon an inherency theory, “the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art” MPEP §2112. The Examiner has failed to meet this burden, and the claimed invention is not obvious.

G. The rejection of Claims 19 and 20 under 35 U.S.C. 103(a) is improper.

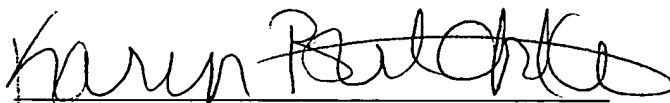
The rejection of Claims 19 and 20 is separately contested from the rejection of Claims 22 et al. Claims 19 and 20 recite that the plurality of laminations are at least partially over molded by a non-structural plastic. The Examiner states that it would have been obvious to one having ordinary skill in the art to further modify the latch of Spurr to include a molded plastic housing. However, the Examiner provided no evidence of this. Spurr does not disclose that the claw 12 or pawl 16 are overmolded. Neither Rogers nor Cutler teaches, suggests, or discloses any overmolding. Therefore, the combination of these references do not teach, suggest or disclose any overmolding as claimed. Claims 19 and 20 are not obvious, and Appellant respectfully requests that the rejection be withdrawn.

CLOSING

For the reasons set forth above, the rejection of all claims is improper and should be reversed.
Appellant respectfully requests such an action.

Respectfully Submitted,

CARLSON, GASKEY & OLDS, P.C.

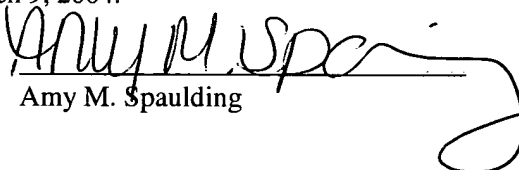


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Dated: March 9, 2004

CERTIFICATE OF MAIL

I hereby certify that the enclosed Appeal Brief (in triplicate) is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on March 9, 2004.



Amy M. Spaulding

CLAIM APPENDIX

4. The latch mechanism as recited in claim 22 wherein said latch bolt includes a plurality of latch bolt laminations.
5. The latch mechanism as recited in claim 4 wherein said plurality of latch bolt laminations combine to form a closed abutment surface, a first safety abutment surface for contact with said pawl of said latch mechanism, a retention surface for engagement with said striker associated with said latch mechanism and a latch pivot pin surface.
6. The latch mechanism as recited in claim 22 wherein said pawl includes a plurality of pawl laminations.
7. The latch mechanism as recited in claim 6 wherein said plurality of pawl laminations combine to form an abutment surface for engagement with a closed abutment surface and first safety abutment surface of said latch bolt and a pawl pivot pin surface.
11. The latch mechanism as recited in claim 22 wherein one of said plurality of laminations includes a tab.
12. The latch mechanism as recited in claim 11 wherein said tab is located on said latch bolt and is for engagement with a chassis of said latch mechanism.
13. The latch mechanism as recited in claim 11 wherein said tab is located on said pawl.
15. The latch mechanism as recited in claim 22 wherein at least one of said plurality of laminations is non homogeneous such that a strength of said lamination as measured in a first direction is different from a strength of said lamination as measured in a second direction.

16. The latch mechanism as recited in claim 15 wherein a first lamination and a second lamination are non homogeneous with a strength of each of said laminations as measured in a respective first direction being different from a strength of said laminations as measured in a respective second direction, said respective first directions of said first and second laminations being aligned.

17. The latch mechanism as recited in claim 15 wherein a first lamination and a second lamination are non homogeneous with a strength of each of said laminations as measured in a respective first direction being different from a strength of said laminations as measured in a respective second direction, said respective first directions of said first and second laminations being misaligned.

18. The latch mechanism as recited in claim 15 wherein said plurality of laminations are made from steel having a grain structure.

19. The latch mechanism as recited in claim 22 wherein said plurality of laminations are at least partially over molded by a non structural plastics material.

20. The latch mechanism as recited in claim 19 wherein said plurality of partially over molded laminations are partially secured by said over molding.

21. The latch mechanism as recited in claim 22 wherein each of said plurality of structural laminations are formed in one piece.

22. A vehicle door latch mechanism for releasably retaining a door comprising:
a latch bolt having a closed condition capable of retaining a striker and an open condition capable of releasing said striker; and
a pawl releasably securing said latch bolt in said closed condition, and at least one of said latch bolt and said pawl is made from a plurality of structural laminations of material wherein a

profile of one of said plurality of laminations is different from a profile of the other of said plurality of laminations.

23. The latch mechanism as recited in claim 22 wherein said profile of one of said plurality of laminations includes a tab having a tab profile and said profile of the other of said plurality of laminations has a local profile proximate to said tab profile, and said tab profile is different from said local profile.

24. The latch mechanism as recited in claim 23 wherein said tab is located on said latch bolt and is for engagement with a chassis of said latch mechanism.

25. The latch mechanism as recited in claim 23 wherein said tab is located on said pawl.

26. The latch mechanism as recited in claim 22 wherein the other of said plurality of laminations does not include a tab.

27. The latch mechanism as recited in claim 22 wherein said profile of one of said plurality of laminations and said profile of the other of said plurality of laminations are external profiles.

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Main Entry: **1**pro·file

Pronunciation: 'prO-"fīl

Function: *noun*

Etymology: Italian *profilo*, from *profilare* to draw in outline,
 from *pro-* forward (from Latin) + *filare* to spin, from Late
 Latin -- more at [FILE](#)

1 : a representation of something in outline; *especially* : a
 human head or face represented or seen in a side view

2 : an outline seen or represented in sharp relief : **CONTOUR**

3 : a side or sectional elevation: as **a** : a drawing showing a
 vertical section of the ground **b** : a vertical section of a soil
 from the ground surface to the underlying unweathered
 material

4 : a set of data often in graphic form portraying the
 significant features of something <a corporation's earnings
profile>; *especially* : a graph representing the extent to
 which an individual exhibits traits or abilities as determined
 by tests or ratings

5 : a concise biographical sketch

6 : degree or level of public exposure <trying to keep a low
profile> <a job with a high *profile*>

synonym see [OUTLINE](#)

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